



Chemical Process Pumps BPO - SERIES

AS PER ISO 2858 / DIN 24256

Capacity up to : 750 M³/Hr.
Temp. up to : 250° C
TDH up to : 140 MLC
Working Pr. up to : 40 Bars
Delivery Size up to : 250 mm



Industries Covered

Pharmaceuticals & Chemical	Oil Extraction Plants
Pulp & Paper Industries	Waste Oil Refining Plants
Starch Industries	Air-Conditioning / Heating Plants
Effluent Treatment Plants	Cooling Tower Water Circulation
Dyes & Intermediates	Solvent Transfer
RO & DM Water Plants	Thermic Fluid Circulation

Material of Construction :

Pumps are manufactured in variety of materials such as

- Stainless Steel as per ASTM A 351/743 Gr. CF8, CF8M, CF3, CF3M, CD4MCu, CN7M(AI 20)
- Duplex Steel as per ASTM A 890/890M
- Nickel Alloys as per ASTM A 494 / 494M Gr. Hastelloy B-C, CZ 100 (100% Nickel)
- Other Alloys: SS 2324 / 2%NiCl / Ni-Resist / D2B / Monel / Inconel 600 / R-55 / Ni 200
- Cast Iron & special Alloy Cast Irons, SG Iron / Ductile Iron.
- Carbon Steel / WCB.
- Bronze / Alluminium & Various Non Ferrous Alloys.

Constructional features :

Pumps are as per DIN 24256 and ISO 2858. The design is of back pull out type. Large variety of models are available to operate at 1450 rpm and 2900 rpm at 50 Hz and 1750 rpm and 3500 rpm at 60 Hz.

Casing :

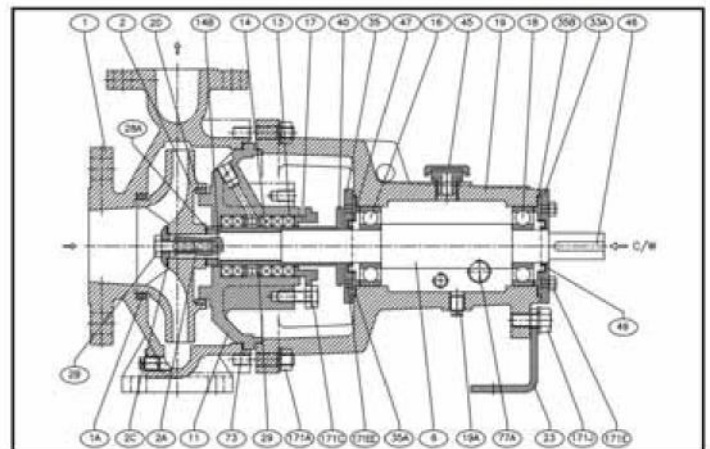
The casing has axial suction and top centre line delivery. Smooth hydraulic passages ensure high efficiency. Normal design is for foot mounted pumps.

Impeller :

The impellers are of enclosed type and semi-open impellers can also be supplied. Hydraulic balancing of impellers is achieved either by back wear ring. The impellers are statically and dynamically balanced.

Shaft :

The shaft is supported by two antifriction bearings to take residual axial thrust and prevent axial float or radial run out. It is fully protected from the liquid handled by means of a shaft



sleeve and PTFE gaskets between impeller nut, impeller hub and shaft sleeve.

Stuffing box :

The stuffing box is sealed by gland packing or by mechanical seal. Conversion from gland packing to mechanical seal is achieved by changing some standardised parts. Re-machining of stuffing box is not necessary.

Bearings :

The bearings are oil lubricated.

Direction of rotation :

Clockwise viewed from driving end.

Flanges :

Standard
Drilling as per ND 16
DIN 2533 (Cast Iron Raised face)
DIN 2543 (Steel-Plain face)

Optional
DIN ND 10, ND 25
ASA 150 BS 10 Table F
BS 4504-16 bar or 25 bar



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 - Cast Iron & special Alloy Cast Irons, SG Iron / Ductile Iron.
 - Carbon Steel / WCB.
 - Bronze / Aluminium & Various Non Ferrous Alloys.

Constructional features :

Pumps are as per DIN 24256 and ISO 2858 and generally conform to API 610 (7th Edition.) The design is of back pull out type. Large variety of models are available to operate at 1450 rpm and 2900 rpm at 50 Hz and 1750 rpm and 3500 rpm at 60 Hz.

Casing :

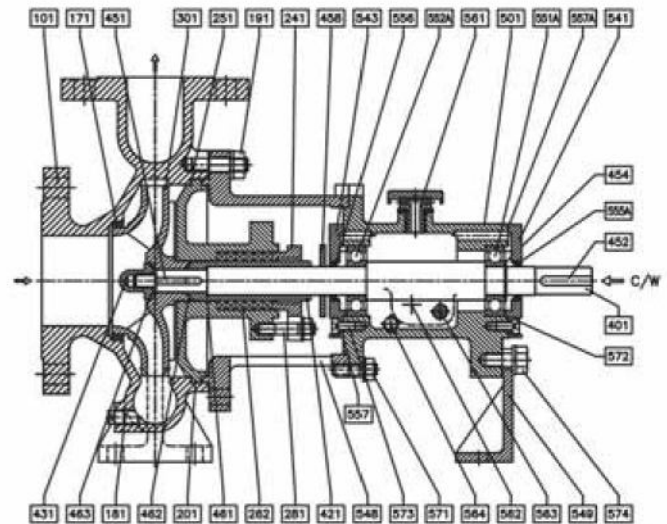
The casing has axial suction and top centre line delivery. Smooth hydraulic passages ensure high efficiency. Normal design is for foot mounted pumps. Centre line mounting for special applications are also available.

Impeller :

The impellers are of enclosed type and semi-open impellers can also be supplied. Hydraulic balancing of impellers is achieved either by back vanes or by balancing holes. The impellers are statically and dynamically balanced. Reliable fixing of the impeller on shaft is achieved by using helicoil insert under impeller nut. To improve NPSH performance, inducer can be supplied.

Shaft :

The shaft is supported by two antifriction bearings to take



residual axial thrust and prevent axial float or radial run out. It is fully protected from the liquid handled by means of a shaft sleeve and PTFE gaskets between impeller nut, impeller hub and shaft sleeve.

Stuffing box :

The stuffing box is sealed by gland packing or by mechanical seal. Conversion from gland packing to mechanical seal is achieved by changing some standardised parts. Re-machining of stuffing box is not necessary. Stuffing box cooling is provided for high temperature applications.

Bearings :

The bearings are oil lubricated. For high temperature application, bearing oil cooling arrangement is provided.

Direction of rotation :

Clockwise viewed from driving end.

Flanges :

Standard	Optional
Drilling as per ND 16	DIN ND 10, ND 25
DIN 2533 (Cast Iron Raised face)	ASA 150 BS 10 Table F
DIN 2543 (Steel-Plain face)	BS 4504-16 bar or 25 bar



Chemical Process Pumps BPO - SERIES Semi-Open Impeller Pumps

Capacity up to : 500 M³/Hr.
 Temp. up to : 200° C
 TDH up to : 180 MLC
 Working Pr. up to : 26 Bars
 Delivery Size up to : 200 mm



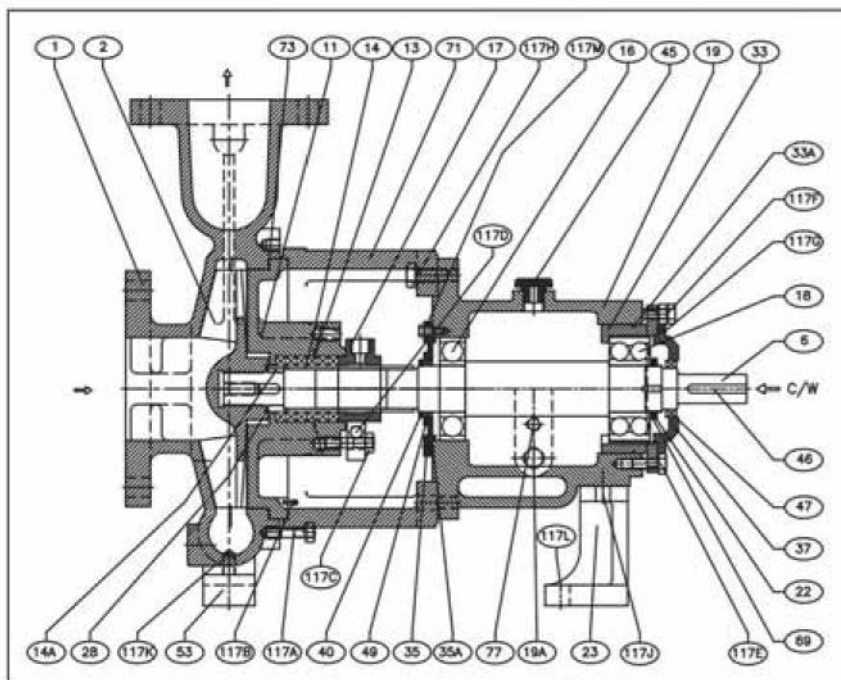
Industries Covered

Pharmaceuticals & Chemical	Oil Extraction Plants
Pulp & Paper Industries	Waste Oil Refining Plants
Starch Industries	Air-Conditioning / Heating Plants
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Dyes & Intermediates	Solvent Transfer
RO & DM Water Plants	Thermic Fluid Circulation

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- Other Alloys: SS 2324 / 2%NiCl / Ni-Resist / D2B / Monel / Inconel 600 / R - 55 / Ni 200
- Cast Iron & special Alloy Cast Irons, SG Iron / Ductile Iron.
- Carbon Steel / WCB.
- Bronze / Aluminium & Various Non Ferrous Alloys.





Thermic Fluid Pumps BPO - SERIES

AS PER ISO 2858 / DIN 24256

Capacity up to : 250 M³/Hr.
Temp. up to : 350° C
TDH up to : 95 MLC
Working Pr. up to : 20 Bars
Delivery Size up to : 100 mm

Industries Covered

Pharmaceuticals & Chemical	Oil Extraction Plants
Pulp & Paper Industries	Waste Oil Refining Plants
Starch Industries	Air-Conditioning / Heating Plants
Effluent Treatment Plants	Cooling Tower Water Circulation
Dyes & Intermediates	Solvent Transfer
RO & DM Water Plants	Thermic Fluid Circulation

Material of Construction :

Pumps are manufactured in variety of materials such as

- Stainless Steel as per ASTM A 351/743 Gr. CF8, CF8M,
- Carbon Steel / WCB,





Chemical Process Pumps

BPO - SERIES

Capacity up to : 15 M³/Hr.
 Temp. up to : 120° C
 TDH up to : 45 MLC
 Working Pr. up to : 10 Bars
 Delivery Size up to : 25 mm

Industries Covered

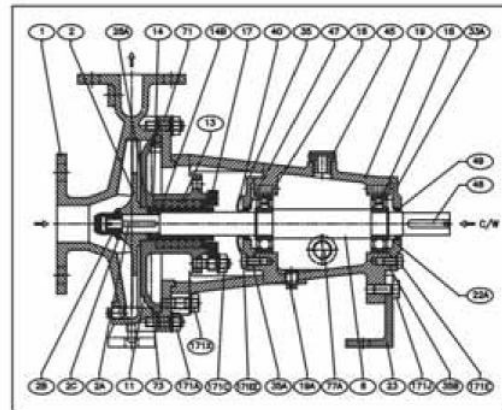
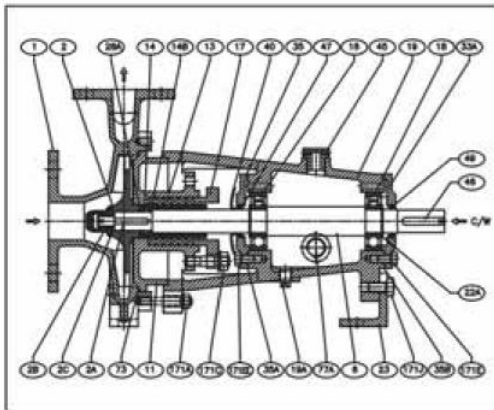
Pharmaceuticals & Chemical	Oil Extraction Plants
Pulp & Paper Industries	Waste Oil Refining Plants
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Material of Construction :

Pumps are manufactured in variety of materials such as

- Stainless Steel as per ASTM A 351/743 Gr. CF8, CF8M, CF3, CF3M, CD4MCu, CN7M(AI 20)
- Duplex Steel as per ASTM A 890/890M
- Carbon Steel / WCB.





"BPO ANSI" SERIES BACK PULLOUT PUMPS (SLURRY APPLICATION)

APPLICATION

- "ACH" Type pumps are used in Chemical & Petrochemicals Industry, Food Industry, Dyeing , Sugar Industry, Paper & Pulp Industry, Fertilizer Units & Etc.
- Handling of all types of Liquids , Acids , Alkalis , Dyes , Hydrocarbons ,Corrosive Slurries (Solids Up to 15 mm) , Green , Black Liquor , Pulp (Consistency up to 2%) & Etc.

DESIGN

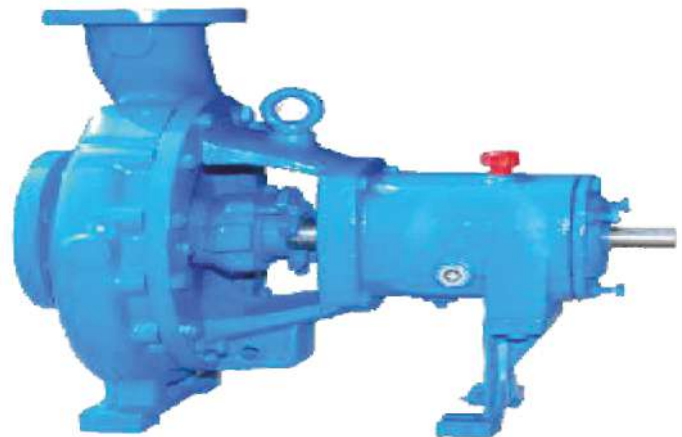
Horizontal Back Pull Out Design Pumps.
Open and Semi Open Impeller Construction with one cylindrical roller Bearing on pump end, one double row angular contact ball bearing on drive end designed in accordance with ANSI B 16.5

SAILENT FEATURES

- Back pull out Centrifugal design
- Steady flow
- Energy Efficient
- Sturdy Construction
- Low NPSH
- Noise & Maintenance Free
- Environment Friendly
- Shaft Deflection Below 0.05 mm
- Simple External axial Adjustment for impeller wear & tear
- Bearing Life-more Than 17000 Operating Hours.

OPERATING RANGE

Capacity	: Up to 600 M ³ /Hr
Head	: Up to 180 Mtrs (590 Feet)
Temperature	: Up to 200° C (392° F)
Casing Pressure	: Up to 24 Kg / cm ²
Pump size (Delivery bore)	: DN 25 mm to DN 200mm
Speed	:Up to 2900 rpm
Direction of rotation	: Clockwise from drive end



Graded CAST IRON, WCB, Cf8, CF8M, CD4MCu, SS 317 L, ALLOY 20, HAST ALLOY 'B' & 'C' & ETC.

Video Link : <https://www.youtube.com/watch?v=EMCSlcJOEtM>



"BPO" SERIES

BPO MEGA STAINLESS STEEL PUMP



RANGE

Delivery size : up to 150 mm
Capacity : up to 550 m³/hr
Head : up to 100 metres

APPLICATIONS

Circulation of water in industries, Air-conditioning plants, Power stations, Mine water, Lift irrigation, Sprinkler systems, Fire fighting, Booster services, Pumping brines, Oils etc. for liquids having temperature in the range of -10°C to 100°C.

MATERIAL OF CONSTRUCTION

Cast Iron
Cast Steel
Stainless Steel
Duplex Steel
Chrome Steel
Phosphor Bronze

FEATURES

These are single stage, single suction, horizontal shaft type. They are made in accordance with DIN 24255. Models are available to operate at 1450 rpm and 2900 rpm at 50/60 Hz.